What is claimed is:

1. A computer system comprising:

a system processor;

an input/output processor; and

an input/output adaptor, connected to the system processor and the input/output processor, and capable of dynamically switching between being controlled by the system processor and being controlled by the input/output processor.

2. A computer system according to claim 1, wherein the input/output adapter is a PCI (Peripheral Component Interconnect) adapter.

3. A computer system according to claim 1, wherein the input/output processor is a PCI-compatible processor.

4. A method for fault recovery in a computer system having a system processor, an input/output processor, and an input/output adaptor connected to the system processor and the input/output processor, that is capable of dynamically switching between being controlled by the system processor and being controlled by the input/output processor, the method for fault recovery comprising:

detecting a fault in the input/output processor; and

switching the input/output adapter to control by the system processor if the input/output adapter is being controlled by the input/output processor when the fault is detected.

5. A method according to claim 4, wherein the input/output adapter is a PCI (Peripheral Component Interconnect) adapter.

6. A method according to claim 5, wherein the input/output processor is a PCI-compatible processor.

7. A method according to claim 4, wherein the computer system has a plurality of dynamically switchable input/output adapters, and each of the dynamically switchable input/output adapters being controlled by the input/output processor when the fault is detected is switched to control by the system processor.

8. A method according to claim 4, further comprising:

detecting correction of the fault in the input/output processor; and

switching the input/output adapter to control by the input/output processor when the correction of the default is detected, if it was previously switched to control by the system processor as a result of the fault in the input/output processor.

9. A method according to claim 8, wherein the input/output adapter is a PCI (Peripheral Component Interconnect) adapter.

10. A method according to claim 9, wherein the input/output processor is a PCI-compatible processor.

11. A method according to claim 8, wherein the computer system has a plurality of dynamically switchable input/output adapters, and each of the dynamically switchable input/output adapters being controlled by the system processor when the correction of the fault is detected is switched to control by the input/output processor if it was previously switched to control by the system processor as a result of the fault in the input/output processor.

12. A method for optimizing processor utilization in a computer system having a system processor, an input/output processor, and an input/output adaptor connected to the system processor and the input/output processor, which is capable of dynamically switching between being controlled by the system processor and being controlled by the input/output processor, the method for optimizing utilization comprising:

determining computer system utilization; and

switching control of the input/output adapter from a first one of the system processor and the input/output processor to a second one of the system processor and the input/output processor, if it is determined that the first one of the processors is being over utilized and that the second one of the processors has sufficient capacity that switching control of the input/output adapter will not adversely affect system throughput.

13. A method according to claim 12, wherein switching control of the input/output adapter from the first one of the processors to the second one of the processors is further based on a determination that the over utilization of the first of the processors is likely to continue for at least a specified period of time.

14. A method according to claim 13, wherein the steps of determining computer system utilization and switching control of the input/output adapter based on such determination are repeated at intervals substantially equal to the specified period of time.

15. A method according to claim 12, wherein the computer system has a plurality of dynamically switchable input/output adapters, and the steps of determining computer system utilization and switching control of the input/output adapter based on such determination are performed for each of the plurality of input/output adapters.

16. A method according to claim 12, wherein the input/output adapter is a PCI (Peripheral Component Interconnect) adapter.

17. A method according to claim 16, wherein the input/output processor is a PCI-compatible processor.